

DEPARTMENT OF THE ARMY
HEADQUARTERS, I CORPS AND FORT LEWIS
Fort Lewis, Washington 98433-9500

FL Regulation
No. 420-4

1 September 1998

Facilities Engineering
REPAIR AND UTILITIES PROGRAM
AND EXPANDED SELF-HELP PROGRAM

1. PURPOSE. Self-help repair of barracks and buildings.
2. APPLICABILITY. This regulation is applicable to occupants of any facility, except for family quarters, maintained by Fort Lewis Public Works (PW), including subinstallations.
3. REFERENCES.
 - a. AR 420- 10, Management of Installation Directorates of Public Works.
 - b. AR420-70, Buildings and Structures.
 - c. AR 710-2, Inventory Management Supply Policy Below the Wholesale Level.
 - d. FL Reg. 11- 1, Fort Lewis Conservation Program.
 - e. TB Eng. 402, Facilities Engineering, Self-Help Program.
 - f. TM 5-610, Preventive Maintenance for Facilities Engineering, Buildings and Structures.
 - g. DA Form 2702, Bill of Materials.
 - h. DA Form 3161, Request for Issue or Turn In.
 - i. DA Form 4283, Facilities Engineering Work Request.
4. GENERAL. The accomplishment of an effective self-help building maintenance and repair program, hereafter referred to as R&U Program, requires continuous and active participation on the part of building occupants. The R&U Program is a means of attaining maximum use of available resources to improve living conditions and general appearance of facilities. R&U representatives can accomplish much of the normal and recurring maintenance and routine repair of buildings by a well-planned and executed program. In addition, R&U representatives may perform minor building

*This regulation supersedes FL Reg 420-4 dated 15 Dec 89.

or grounds alteration and improvement projects or provide guidance to their units on the accomplishment of more extensive alteration and improvement projects, under the Expanded Self-help (EMS) program and 'Troop U Do It', which is a troop supported barracks improvement program. The concept of this program is for PW to provide material as well as training for R&U representatives in each battalion so they can complete their own barracks improvements. Each Major Subordinate Command (MSC), HHC I Corps and USAG will be allocated a budget to support troop improvements. In general, R&U representatives are responsible for the periodic inspection of their facilities, the detection of deficiencies, and the repair of all detected deficiencies within their capability. Deficiencies detected which cannot be repaired by R&U representatives will be reported to PW by calling the PW work order desk at 9673131 for routine repairs beyond the scope of the R&U Program. All self-help alteration and improvement projects shall be requested through the PW work order section on a DA Form 4283, Facilities Engineering Work Request.

5. R&U PROGRAM.

a. Responsibilities.

(1) PW is responsible for:

(a) Staff and technical supervision and guidance for the R&U Program.

(b) Providing essential maintenance and repair supplies to battalion level R&U teams that are not available to issue through the Directorate of Logistics (DOL) or available in Table of Organization (TO&E) and Equipment of Common Table of Allowances (CTA) or General Services Administration (GSA) tool sets. Lost tools or those broken by negligence will be replaced according to unit policy. Accountability for hand tools will be in accordance with AR 710-2.

(c) Providing training for R&U representatives and issuing the self-help customer identification card authorizing the bearer to receive self-help assistance upon completion of the training course. Courses for R&U representatives will be conducted at their work sites. Arrangements can be made for training by visiting the R&U Center, Bldg. 7913, between 1230 - 1430 Monday thru Friday, or call 967-8034.

(d) Ensuring that materials are issued to R&U representatives who possess a valid self-help customer identification card.

(2) Battalions are responsible for:

(a) The appointment of a battalion R&U representative, by memorandum to the

R&U Center. That R&U representative will act as the central point of contact between PW and the battalion and is the only authorized individual to call in routine work orders to the PW work order desk. In the event that he/she is not available during

an emergency, service orders can be submitted by the battalion S4 officer, S4 non-commissioned officer in charge (NCOIC), company commander, or first sergeant. R&U representative changes will be made in advance by memorandum to the R&U Center, at AFZH-PWO-M, MS 17F.

(b) Ensuring materials drawn from the R&U Center are not used for self-help alteration and improvement projects requested on a DA Form 4283 which will have materials specifically issued for those projects.

(b) Assuring that required tools shown in appendix B are on hand and available for use.

(3) Companies or batteries are responsible for:

(a) The establishment of company or battery level R&U representatives to accomplish tasks shown in appendix A, sections 1 through 4. One individual and one alternate is required per company.

(b) Sending all R&U representatives to R&U training. Arrangements will be made by sending a memorandum to the R&U Center, identifying the individual(s) name, rank, telephone number, and dates of desired attendance. Verification of training site and time will be made by the R&U Center. Only personnel interested in minor maintenance and repair who can be used effectively for six months or more with minimum training requirement conflicts will be scheduled. They will be replaced six months prior to Estimated Time of Separation (ETS) or Permanent Change of Station (PCS).

(c) Coordinating to ensure all facility requirements are reported to the R&U representative. The R&U representative will execute all necessary self-help repairs or submit a service order by calling the work order desk.

(4) Organizations other than companies or battalions that are hand receipted for facilities are responsible for:

(a) The establishment of an R&U Program to accomplish the tasks shown in appendix A, sections 1 through 4.

(b) Designation of an organization R&U person (by memorandum to the R&U Center) to act as a central point of contact with the center and submit requests for service orders for repair assistance by calling the work order desk.

(c) Sending all R&U representatives to the R&U training. Arrangements will be made by sending a memorandum to the R&U Center. This memorandum will list individual(s) name, rank or civilian grade, telephone number, and desired dates of

attendance. Verification of space availability will be made by R&U Center. Only personnel interested in minor maintenance and who can be used effectively for six months or more with minimum training requirement conflicts will be scheduled. They personnel will be replaced six months prior to ETS or PCS.

(d) The establishment of an R&U Program to accomplish the tasks shown in appendix A, sections 1 through 4.

(e) Designation of an organization R&U person, by memorandum to the R&U Center, to act as a central point of contact with the center and submit requests for service orders for repair assistance by caning the work order desk.

(f) Coordinating to ensure all facility requirements are reported to the organization R&U central point of contact for repair.

(g) Ensuring materials drawn from the R&U Center are not used for self-help alteration and improvement projects requested on a DA Form 4283 which will have materials specifically issued for those projects.

(h) Submission of a request for exception to policy if the organization cannot perform the required R&U work. This request must be in writing to the Director of Public Works, AFZH-PWO-M, MS 17F, explaining in detail the circumstances that prevent the R&U work from being accomplished and listing the facility numbers for which the organization is responsible. The DPW will approve or disapprove the request based on merits of each request.

b. Details of Operation.

(1) Public Works.

(a) The R&U Center provides necessary tools, materials and supplies not available through the GSA, unit TO&E, TDA, CTA or DOL for routine maintenance and repair.

(b) Issue of some items is strictly controlled (appendix E) and requires submission of a DA Form 4283.

© The R&U Center provides training, guidance and assistance on all routine maintenance and repair items.

(d) PW will provide feedback to the organizational commander on the effectiveness of the R&U Program based on the observations of the PW R&U mechanic serving the unit.

(2) Battalions, companies.

(a) The unit's R&U representative is directly responsible for implementation of the R&U Program in all facilities and grounds occupied by their organization.

(b) The R&U representative shall accomplish each task shown in appendix A, sections 1 through 4, with the help of unit R&U representatives and the PW R&U mechanic assigned to their unit.

© If deficiencies are beyond the R&U representative's capabilities, contact the PW R&U unit field representative at 967-7288. If the problem affects life, safety, physical security or will result in structural damage, call the PW service order desk.

(d) R&U representatives shall assist the PW repairers when they are working service orders in the organization area. Locked rooms will be available for entry.

(e) Only the R&U central point of contact is authorized to submit service orders to PW. In the event that he/she is not available during an emergency, service orders can be submitted by the battalion S4 officer, S4 non-commissioned officer in charge (NCOIC), company commander, or first sergeant.

(3) Other organizations.

(a) The designated R&U representative is directly responsible for the implementation of the R&U Program in all facilities and grounds occupied by the organization.

(b) The R&U representative shall accomplish each task shown in appendix A, sections 1 through 4, with the help of unit R&U representatives.

(c) Only the R&U central point of contact is authorized to submit service orders to PW or draw supplies from the R&U Center or DOL. In the event that he/she is not available during an emergency, service orders can be submitted or material drawn by his/her supervisor.

c. Emergency repairs. An emergency, i.e., **BROKEN WATER PIPES, POWER FAILURE. HEAT FAILURE. BROKEN OR PLUGGED SEWER LINES**, should be reported without delay to the PW emergency work order desk, 967- 3680, 24 hrs/day.

d. Precautions and safety measures.

(1) R&U representatives will not attempt to repair electric circuits, water or steam distribution lines and systems, or work on roofs.

(2) Work involving the use of ladders and scaffolds is hazardous by nature. Particular care will be taken to ensure ladders are in good condition, well secured, and guarded when in use. Care must be taken to prevent injury to the passerby from falling objects.

6. EXPANDED SELF-HELP PROGRAM (TROOP U DO IT).

a. General. This program offers an opportunity for organizations to complete maintenance, repair, alteration and improvement projects on a self-help basis. If the requesting organization has the necessary manpower and expertise, this may be a preferred alternative to having the work done by PW. A project done in this manner may be accomplished more quickly and at less expense, because it does not compete for limited personnel resources. Some of the projects which may be accomplished under this program include, but are not limited to, painting, renovation by addition or removal of non-structural partitions, replacement of floor, ceiling or wall coverings and landscaping.

b. Responsibilities.

(1) PW is responsible for:

(a) Staff and technical supervision and guidance for the program.

(b) Approval/disapproval for ESH alteration and improvement projects.

(c) Providing essential expanded tools and equipment that are not available through the R&U Program. Lost tools or those broken by negligence will be replaced according to unit policy. Accountability for hand tools will be in accordance with AR 710-2.

(d) Provision of on-site training for on-site personnel.

(e) Providing inspection and technical guidance on approved ESH alteration and improvement projects.

(f) Developing a DA Form 2702, Bill of Materials, and providing those materials on all approved ESH alteration and improvement projects.

(g) Total installation funding in support of this program is provided as funds are available. Sub-allocation to each MSC is on a per capita basis with respect to assigned vs. actually living in the barracks. In addition, savings from the unit Energy Conservation Program will be reinvested back into the barracks improvement program.

(2) Organizations are responsible for:

(a) The appointment of a ESH project coordinator for each project requested. The coordinator will act as the central point of contact between R&U and the organization during the planning and execution of the approved project and is the only individual authorized to request and draw materials, tools and equipment from R&U or DOL for the project. DOL supplies for troop self-help will be issued from Bldg. 2070 phone: 967-7115, based on a DA Form 2702 approval by the PW R&U Center or assigned mechanic.

(b) Ensuring materials drawn from R&U are only used for the project for which they were issued and returning any excess materials to R&U.

(c) Ensuring all personnel involved in the approved ESH project receive R&U training. Scheduling ESH training will be done by the R&U Project Manager after approval of the ESH project.

(d) Ensuring timely completion of the ESH project.

c. Details of operation.

(1) Public Works.

(a) The Planning Division reviews all DA Forms 4283 for self-help alteration or improvement projects and approves or disapproves the project based on installation requirements, unit requirements, project feasibility, costs and unit skills/capabilities.

(b) PW will provide a detailed job estimate, drawings and sketches, a DA Form 2702 and necessary coordination for technical assistance, on site ESH training, issue of materials, equipment and tools, inspections and progress reports.

(c) PW will provide a phased, ESH project inspection checklist for each project, (appendix D). Each phase of the project must be inspected and approved by a project manager before the organization can proceed to the next phase of the project. This will enable PW to ensure that all phases of the ESH project meet applicable life, safety and building codes.

(d) The R&U Center will maintain a resource center for ESH projects including a reference library, training classes, tools and equipment. This resource center is available for use by those organizations with approved ESH projects.

(d) The R&U Center will provide a PW mechanic to all unit R&U representatives who will provide training and coordination between the R&U representatives and all

PW shops. See appendix E for list of PW R&U mechanics and their assigned areas.

d. Organizations.

(a) The requesting activity shall submit an ESH project package for each ESH project requested. The project package shall consist of a DA Form 4283, a detailed description including line drawings of the proposed project, and a detailed report of the organization's resources reflecting the number and qualifications of personnel available for utilization on the project.

(b) The requesting activity shall designate a central point of contact for each proposed ESH project. Upon approval of the project, the organization point of contact shall coordinate with the project manager to schedule organization personnel for appropriate classes.

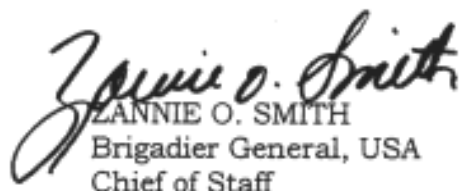
(c) Units will identify and dedicate soldiers to the project.

(d) The troop supported barracks projects are training events and must be scheduled on their respective training schedules.

(e) After unit commanders/ ISGs identify desired barracks improvement projects, they submit their requests to their MSC commander/CSMs. MSCs will concur and prioritize subordinate projects prior to submission to PW.

(AFZH-PWO, 967-5237)

FOR THE COMMANDER:


LANNIE O. SMITH
Brigadier General, USA
Chief of Staff

APPENDIX A- Preventative Maintenance Tasks Performed By R&U Representatives
APPENDIX B- Required Self-Help Program Tool List APPENDIX C- Expanded Self-Help
Construction Permit APPENDIX D- Restricted Use or Quantity Items

DISTRIBUTION

A, B, C, D

APPENDIX A

PREVENTATIVE MAINTENANCE TASKS PERFORMED BY R&U REPRESENTATIVES

SECTION I

Carpentry for Buildings

1. GENERAL

- a. Repair or replace surface hardware.
- b. Remove protruding nails, screws, or other objects from walls and woodwork.
- c. Patch interior walls and ceilings (minor).
- d. Caulk around leaky shower base.
- e. Touch up paint throughout building interior.
- f. Replace broken lavatory mirrors (12" x 18" only).
- g. Paint all new replacement materials.
- h. Repair wooden steps.
- i. Repair skirting on buildings.
- j. Replace stair treads.
- k. Repair corner boards (on building corners).
- 1. Tighten all loose handrails.
- m. Replace glass in wood or metal doors.
- n. Repair or replace wood hand rails.

2. DOORS AND SCREEN DOORS (INTERIOR AND EXTERIOR)

- a. Check and tighten all loose door knobs.
- b. Check and tighten all escutcheon plates.
- c. Check and tighten all strike plates.

- d. Check and tighten screws on door hinges, closures and jambs.

- e. Check and tighten screws on panic hardware.
- f. Check and repair door casings.
- g. Replace door astragals, door stops, door sills, thresholds and latches.
- h. Repair or replace door knobs, escutcheon plates, strike plates, and kick plates.
- i. Repair or replace butt hinge on doors and screen doors.
- j. Repair or replace hooks and eyes on doors.
- k. Repair or replace screen door springs and pulls.
- l. Caulk around leaky door frames.
- m. Repair or replace foot and chain bolts.
- n. Check doors for asbestos.

3. WINDOWS AND SCREENS

- a. Replace or secure barrel bolts on window sash.
- b. Check and re-nail window casings.
- c. Re-nail window frames where necessary.
- d. Repair or replace hooks and eyes on window screens.
- e. Caulk around leaky windows.
- f. Re-putty window sash as necessary.
- g. Repair/re-hang insect screens to assigned buildings.
- h. Caulk around leaky window frames.
- i. Check and adjust all sliding windows.

SECTION 2

Grounds Maintenance

1. Mowing of lawn areas, cutting and removal of all weed growth.
2. Irrigation and/or watering of lawn areas, to include the watering of trees and shrubs when necessary during dry seasons.
3. General police of areas to include lawns, sidewalks and roadways of all debris such as rocks, sticks, and trash.
4. Spot seeding of bare spots and fertilizing of lawn areas will be accomplished during spring and fall.
5. Top soil and beauty bark is available for lawn and flower bed restoration.
6. R&U teams are responsible for snow and ice removal from sidewalks and steps.
7. Selected lawn and grounds maintenance equipment to include riding mowers are available on a seasonal basis. R&U representatives must submit to a one-hour riding mower familiarization class prior to using this equipment.

SECTION 3

Electrical

1. Distribution panel: If panels are accessible, blown fuses or tripped switches may be reset. However, if this does not solve the problem, call PW.
2. Lamps: Check lamps for proper size in accordance with lamp schedule. Remove lamps larger than authorized and replace with proper size (see FL Reg. 420-3, Appendix B).
3. Fluorescent Lamps: Check lamps and starters as required to protect the ballast. Replace tubes that are out, darkened, or flashing (see FL Reg. 420-3, Appendix B).
4. Switches and Receptacles: Replace switches and receptacles found defective. Assure all power is off first.
5. Plates and Covers: Replace plates and covers that are broken or missing. Tighten all screws.

6. Replace ballast in fluorescent light fixtures. Turn in old ballast for replacement at the Self Help Center.

7. Unauthorized Equipment: Have tenant remove unauthorized appliances and extension cords.

SECTION 4

Plumbing

1. Check grease traps for cleanliness and proper operation. Instruct R&U representative in proper cleaning procedures.
2. Check all hot water tanks for any leaks in piping and in tank itself. Check insulation on all hot water tanks.
3. Check piping in the building, including all hot and cold water feed and distribution lines. Check for any leaks and need for hangers or other supports.
4. Check all drinking fountains. Clear stopped or sluggish drains.
5. Check refrigerated drinking fountains for leaks, water flow adjustment, and drain stoppages.
6. Check all floor drains. Clear stopped or sluggish drains. Replace drain covers if missing or broken.
7. Check all urinals. Clean any stoppage.
8. Check all basins. Replace stoppers. Clean any plugged drains. Repair waste lines under basin.
9. Check and repair all faucets and valves on basins, showers, sinks, etc. Replace handles, stems, packing washers, seats, bib screws except single control shower faucets.
10. Check and repair toilets. Clean any stoppage. Repair or replace toilet seats and hinges.
11. Replace missing soap dishes, toilet paper holders, check present ones for any loosening from the walls and tighten as required.
12. Repair all flushometers on urinals and toilets and adjust water flow. Diaphragm, pistons, seats, head gaskets, flush valve handles.

APPENDIX B

REQUIRED SELF HELP PROGRAM TOOL LIST
(See note below)

ITEM NOMENCLATURE	NATIONAL STOCK NUMBER	QTY
1. CHISEL, Wood Butt, 3/8" to 1~4"	5110-00-585-8428	1
2. CUTTER, Glass	5110-00-222-4400	1
3. FORCE CUP, Long Handle, Type A 5/a"		
5120-00-223-8928	1	
4. HAMMER, Carpenter, Nail, Curved Claw 16 oz	5120-00-223-9124	1
5. KNIFE, Putty 1 1/4" x 3 1/~" Blade	5120-00-221-1 536	1
6. CHANNEL LOCK PLIERS	5120-00-045-6534	1
7. SAW, Hand, Crosscut Type 26", 8 pt & 10 pt	5110-00-293-3435	1
8. SCREWDRIVER, Phillips	5120-00-234-8913	1
9. SCREWDRIVER, 4"	5120-00-237-8173	1
10 SCREWDRIVER, 6"	5120-00-237-8172	1
11 WRENCH, Spud, 1"	5120-00-473-6476	1
12. TAPE MEASURE, 16'	5120-00-293-3393	1
13. KNIFE, Scraping	5110-00-223-8827	1
14 TOILET AUGER	512G-00-240-7561	1
15 PIPE & SEWER AUGER, 1/4 Can	5120-00-393- 1912	1
16. TOOL BOX (Optional)	5140-00-000-4730	1
17. STEP LADDER	5440-00-227-1594	1
18. TAPING KNIFE, 6" & 8"		
19. UTILITY KNIFE		
20. 2" TUBING CUTTER		
21. FAUCET SEAT TOOL		
22. TAPING TRAY, 12"		
23. WONDER BAR		
24. SHEET ROCK SAW		
25. COMBINATION SQUARE		
26. PLIERS, Needle nose, insulated		
27. PLIERS, Lineman's insulated		
28. BASIN WRENCH		
29. PIPE WRENCH, 18"		

Note: These tools, with the exception of step ladders, are normally available through usual supply channels and are not furnished by PW.

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APPENDIX C

EXPANDED SELF HELP CONSTRUCTION PERMIT

This permit is required for all Expanded Self Help construction projects and shall be posted at the construction site. Construction shall be phased in the order shown below and each applicable item shall be approved by PW prior to proceeding with the next phase.

BUILDING NO. _____ IJO NO. _____

UNIT POC (Name and No.) _____

PW PROJECT MANAGER (Name and Telephone No.) _____

<u>ITEM</u>	<u>OK</u>	<u>DATE</u>	<u>COMMENTS</u>	<u>INSPECTOR</u>
FOUNDATION	_____	_____	_____	
FRAMING	_____	_____	_____	
ROUGH-IN	_____	_____	_____	
ELECTRIC	_____	_____	_____	
ROUGH-IN	_____	_____	_____	
PLUMBING	_____	_____	_____	
INSULATION	_____	_____	_____	
FINAL ELECTRIC	_____	_____	_____	
FINAL PLUMBING	_____	_____	_____	
WALLS	_____	_____	_____	
CEILING	_____	_____	_____	
FLOORS	_____	_____	_____	
WINDOWS	_____	_____	_____	
INTERIOR FINISHES	_____	_____	_____	

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APPENDIX D

RESTRICTED USE OR QUANTITY ITEMS

<u>ITEM</u>	<u>MONTHLY QUANTITY</u>
PAINT*	4 gallons per color
LUMBER**	40 board feet
SHEETROCK	1 sheet
INSULATION	32 square feet
NAILS	5 pounds
SCREWS	1 pound

*Yellow/white traffic paint will not be issued to troop units.

**The quantities listed above are for issue to R&U representatives for use in minor maintenance and repair. Any quantities greater than those listed must be requested on a DA Form 4283, Facilities Engineering Work Request, through PW, Building 4301.